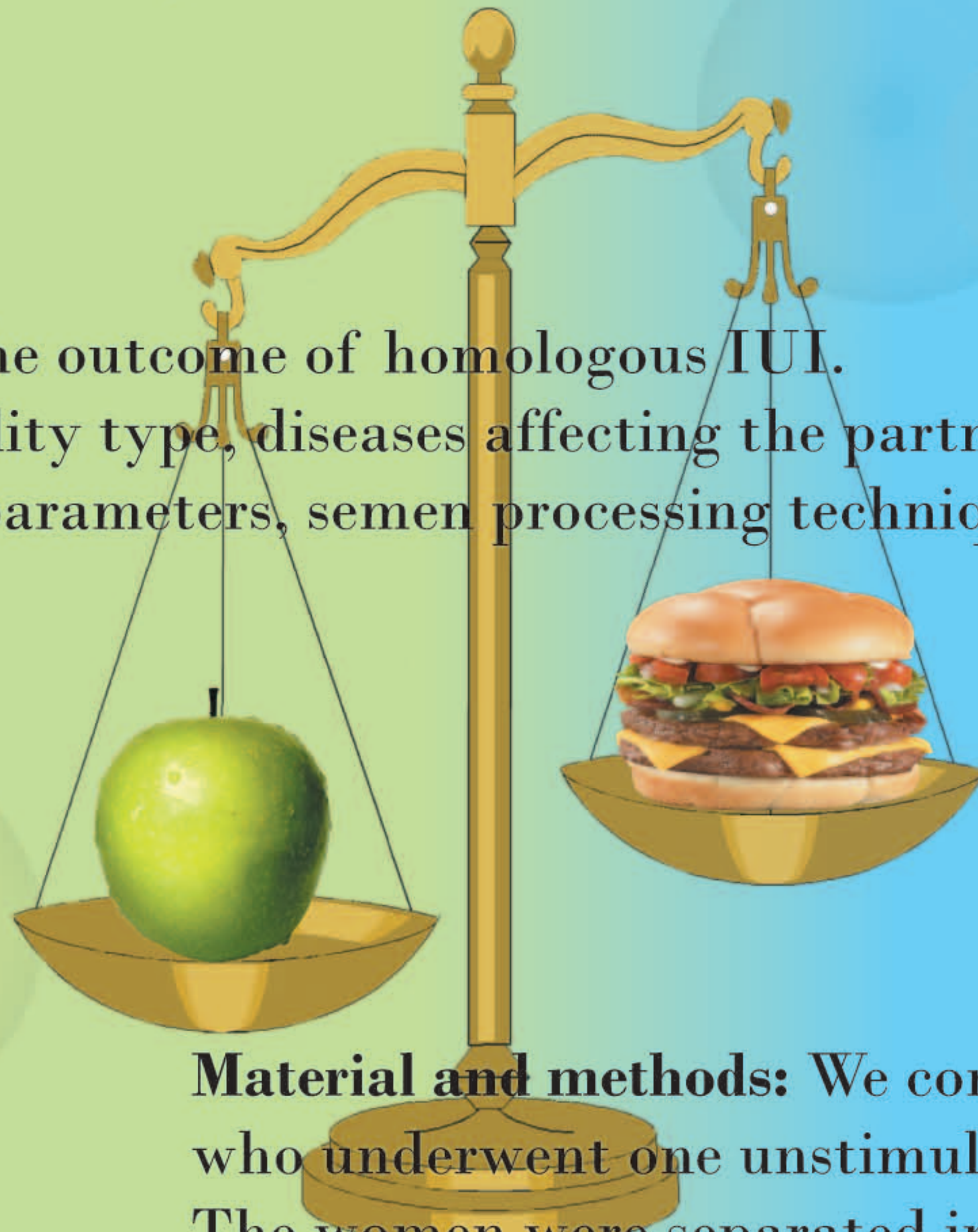


Influence of physiological factors in homologous intrauterine insemination outcome

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Introduction: Many factors affect the outcome of homologous IUI. Among them are females' age, sterility type, diseases affecting the partners, body mass index (BMI), ejaculate parameters, semen processing techniques, spermatozoa's survival rate etc.



Material and methods: We conducted a study of 694 women, who underwent one unstimulated cycle of homologous IUI. The women were separated into two age groups: Group 1 – women below age 35 and Group 2- above 35. The mean age was 32.9 years (ranging from 22 to 45). Each group was divided into two subgroups according to the BMI: subgroup 1.1. (age <35 and BMI >25), subgroup 1.2. (age <35 and BMI range 19-25), subgroup 2.1. (age >35 and BMI >25) and subgroup 2.2. (age >35 and BMI range 19-25).



Results: This study demonstrated that in subgroup 2.1. the pregnancy rate (PR) per cycle was the lowest 2.7%. In contrast, in subgroup 1.2. the PR was five-fold higher, amounting 12% ($P \leq 0.05$). In the remaining subgroups - 1.1. and 2.2., the PR per cycle was 9.5% and 7.4% respectively. Despite the advanced female age in group 2, the percentage of developing pregnancies was significantly higher in the normal weight subgroup 2.2. (7.4%) comparing to the overweight subgroup 2.1. (2.7%), ($P \leq 0.05$).



Female age	< 35 age		> 35 age	
	BMI > 25	BMI = 19-25	BMI > 25	BMI = 19-25
PR (%)	9.5%	12%	2.1%	7.4%

Conclusions: To improve the outcome of homologous IUI, we suggest an appropriate diet and physical activities for all obese women prior to enrolment in the ART program.

fat



Key words: BMI, ART, IUI, females' age, PR



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